

# IN THE CLAIMS

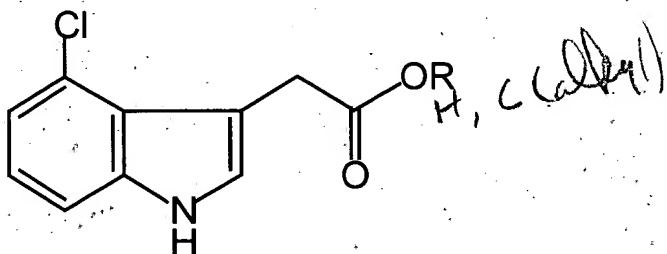
Please cancel claims 1-4

Please add the following claims

A 2

5. A root-inducing system comprising:

a solution comprising water and a root inducing compound of formula I.



wherein R is selected from the group consisting of hydrogen, allyl, methyl, ethyl, 1-propyl, 2-propyl, 1-butyl, isobutyl, (R)2-butyl, (S)2-butyl, tert-butyl and 1-pentyl;

wherein the root inducing compound of formula I is in a concentration sufficient to induce the generation of roots when the solution is applied to the leaves of a plant;

a sprayer containing the solution with directions to apply the solution to plant leaves to form root growth.

6. The root-inducing system of claim 5 wherein the compound has a concentration of  $10^{-7}$  to  $10^{-2}$  M.

A 2  
7. The root-inducing system of claim 5 further comprising:  
an alcohol.

8. The root-inducing system of claim 5 further comprising:  
a polyoxyethylenealkyl phenyl ether.

9. The root-inducing system of claim 5 further comprising:  
an organic solvent.

10. The root-inducing system of claim 9 wherein the organic solvent is xylene.

11. The root-inducing system of claim 5 further comprising:  
a beneficial agricultural chemical, wherein the beneficial agricultural chemical is selected from the group consisting of fertilizers, spreading agents and plant growth regulators.

12. The root-inducing system of claim 5 further comprising:

a sodium dodecylbenzenesulfonate.

13. The root-inducing system of claim 5 further comprising:

a nonyl phenyl ether.

14. The root-inducing system of claim 5 further comprising:

A 1 an ester of 4-chloroindole-3-acetic acid;

a container wherein said container provides instructions to user to dilute the ester of 4-chloroindole-3-acetic acid to a concentration of  $10^{-7}$  to  $10^{-2}$  M in water and apply to the surface of a plant leave to induce root growth.

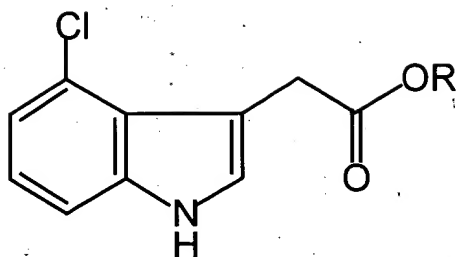
15. The root-inducing system of claim 5 further comprising:

an automated sprinkling system wherein said sprayer is permanently affixed to said automated sprinkling system.

16. A concentrated root-inducing solution for plants through application to leaves comprising:

a solution selected from the group consisting of water, alcohols and organics;

a root inducing compound of formula I



A 1 wherein R is selected from the group consisting of hydrogen, allyl, methyl, ethyl, 1-propyl, 2-propyl, 1-butyl, isobutyl, (R)2-butyl, (S)2-butyl, tert-butyl and 1-pentyl;

wherein the solution is mixed with the compound until a liquid is formed;

a container that directs the user to dilute the contents in water to a concentration of  $10^{-7}$  to  $10^{-2}$  M and apply to the surface of leaves to induce root growth.

17. A method to promoting root growth on plants comprising:

providing a solvent;

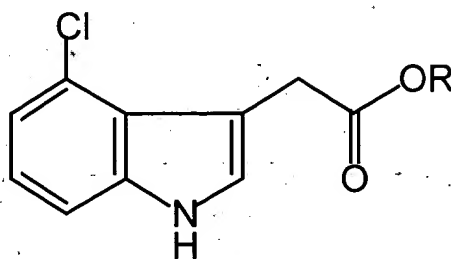
mixing a root inducing compound with the solvent to form a liquid;

applying the liquid to a plant leaf to induce root growth.

*of formula 1*

18. The method promoting root growth on plants of claim 17 further comprising:

providing a root inducing compound of formula I



wherein R is selected from the group consisting of hydrogen, allyl, methyl, ethyl, 1-propyl, 2-propyl, 1-butyl, isobutyl, (R)2-butyl, (S)2-butyl, tert-butyl and 1-pentyl;

forming a concentration of  $10^{-7}$  to  $10^{-2}$  M of the root inducing compound of formula I.

19. The method promoting root growth on plants of claim 17 further comprising:

adding polyoxyethylenealkyl phenyl ether.

20. The method promoting root growth on plants of claim 17 further comprising:

adding beneficial agricultural chemical, wherein the beneficial agricultural chemical is selected from the group consisting of fertilizers, spreading agents and plant growth regulators.

21. The method promoting root growth on plants of claim 17.

further comprising:

adding sodium dodecylbenzenesulfonate.

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22. The method promoting root growth on plants of claim 17.

further comprising:

adding nonyl phenyl ether.

23. The method promoting root growth on plants of claim 17

further comprising:

placing the liquid in a sprayer capable of containing the solution.

24. The method promoting root growth on plants of claim 17

further comprising:

selecting a stem having at least one leaf;

positioning the stem into a soil plug.